

# Copyright and Attribution Considerations for the Classroom

**2016 Teaching Conference**

**Gail Clement and Donna Wrublewski**  
**September 21, 2016**

**Caltech** Library



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# Attribution & Copyright = good teaching practices

The classroom is a rich environment for sharing our own work and that produced by others

Even classroom sharing may require attribution and copyright compliance

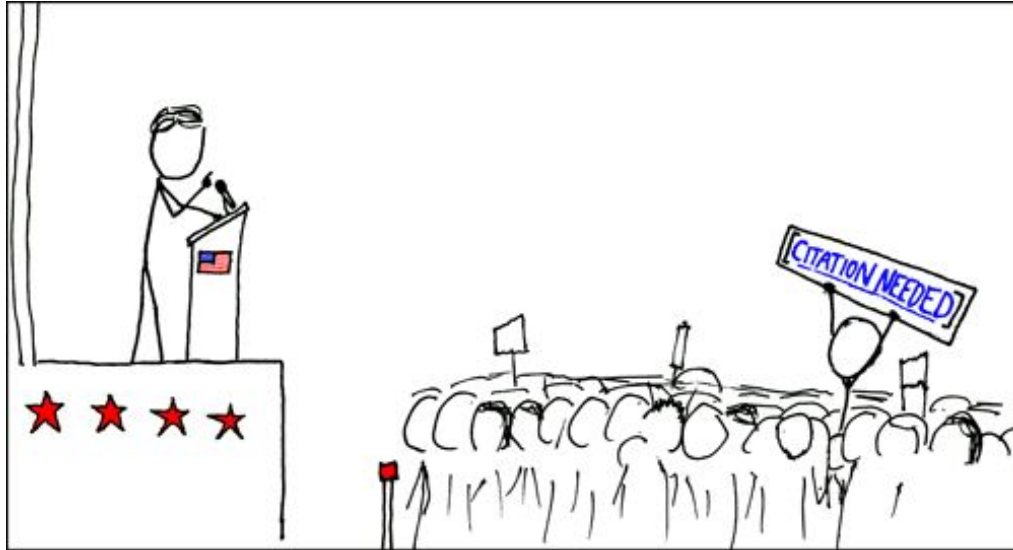
Demonstrating information handling best practices sets a good example for students!



“Richard Feynman teaching Physics X” Photo by Floyd Clark, 1976.  
CaltechArchives.  
<http://archives-dc.library.caltech.edu/islandora/object/ct1%3A544>

# Working Definitions

**Attribution:** Giving Credit Where Due



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# Attribution: Key Points

- Give attribution
  - Avoid plagiarism
  - Honor Code
- Establish credibility
  - Cite reputable and reliable sources
- Provide background for work
  - How does new information extend what's known?



PubChem | OPEN CHEMISTRY DATABASE

Compound Summary for CID 2519

PUBCHEM > COMPOUND > CAFFEINE

## Caffeine

Vendors Drug Information Pharmacology Literature Patents Bioactivities

### 4.2.6 Melting Point

236.2 deg C  
*Haynes, W.M. (ed.). CRC Handbook of Chemistry and Physics. 94th Edition. CRC Press LLC, Boca Raton: FL 2013-2014, p. 3-90*  
▶ from HSDB

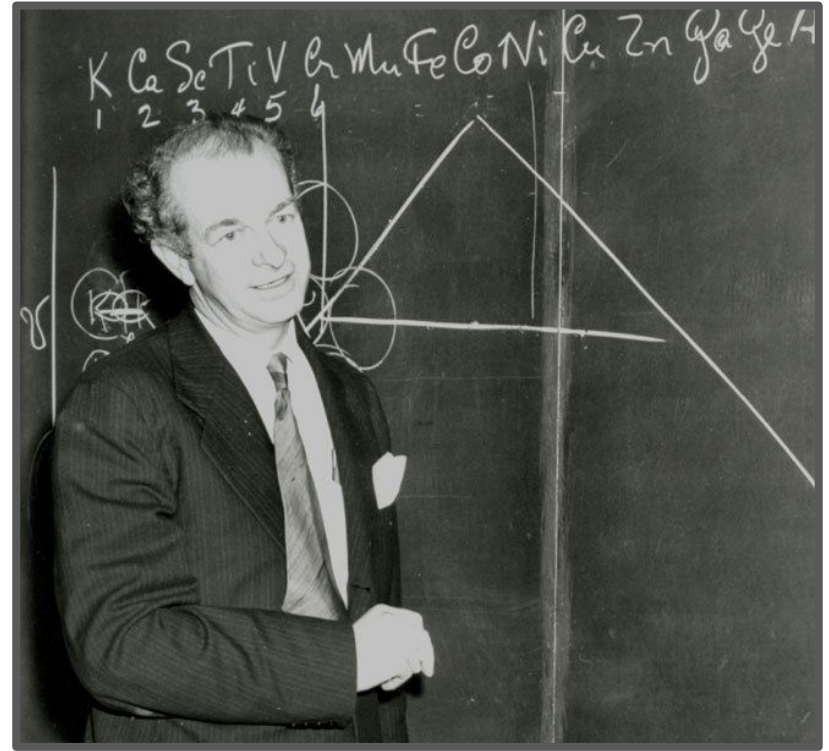
238 °C  
*PhysProp*  
▶ from DrugBank

238°C  
▶ from ILO-ICSC

460° F (NTP, 1992)  
▶ from CAMEO Chemicals


Source: <https://pubchem.ncbi.nlm.nih.gov/compound/2519>

How do I  
properly use  
an image or a  
video in my  
class?



*Professor Linus Pauling stands in front of a chalkboard, 1940. Oregon State University Archives. Papers of Linus Pauling, <http://scarc.library.oregonstate.edu/coll/pauling/catalogue/index.html>*

# Case Study: Images



543368577

## Buckminsterfullerene

Credit: [Evan Oto](#)  
Creative #: 543368577

A molecular model of buckminsterfullerene, a fullerene molecule with 60 carbon atoms creating a stable spherical shape with 20 hexagon faces and 12 pentagon faces.

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### Details

License type: [Rights-managed](#) ⓘ  
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Release info: No release required

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### Keywords

Model - Object

Molecular Structure

Respect

Carbon Atom

Chemistry

Color Image

Fullerene

Horizontal

Illustration

No People

Science

Shape

Sphere

White Background

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# Case Study: Images

## BUCKMINSTERFULLERENE

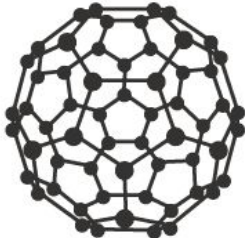
Sir Harry Kroto, one of the winners of the 1996 Nobel prize in chemistry, passed away recently. Here, we take a look at the molecule that won him his Nobel prize,  $C_{60}$ , or Buckminsterfullerene.

**$C_{60}$  - 'BUCKYBALLS'**

Football-shaped form of carbon

**Truncated icosahedron**  
12 pentagonal faces, 20 hexagonal faces

**Nobel Prize: 1996**



$C_{60}$  occurs naturally, and is found in soot in small quantities. It's also been observed in space. It's named after Buckminster Fuller, an architect whose geodesic domes it resembles. The first of the fullerenes to be discovered, there are now a number of recognised types, including carbon nanotubes.

### A BRIEF HISTORY OF BUCKMINSTERFULLERENE



Existence of the  $C_{60}$  molecule proposed by the Japanese scientist Eiji Osawa. **1970**

Astrophysicists Wolfgang Krätschmer and Donald Huffman develop a method to make  $C_{60}$  in larger quantities. **1990**

Buckyballs detected in space; they could be responsible for mystery interstellar absorptions. **2010**

**1985**  
 $C_{60}$  discovered during work investigating carbon clusters formed in conditions similar to those in red giant stars.

**1996**  
Nobel prize in chemistry awarded to Harry Kroto, Robert Curl, and Richard Smalley, for discovery of fullerenes (including  $C_{60}$ )



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Sample language to look for:

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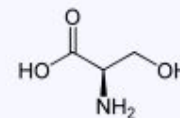
Source: Compound Interest - Sir Harry Kroto & Buckminsterfullerene, <http://www.compoundchem.com/2016/05/02/buckyballs/>  
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# Case Study: Images



This image of a simple **structural formula** is **ineligible for copyright** and therefore in the **public domain**, because it consists entirely of information that is common property and contains no original authorship.

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Source: Wikimedia Commons, File:Buckminsterfullerene.svg,  
<https://commons.wikimedia.org/wiki/File:Buckminsterfullerene.svg>



# Copyright: Key Points

Copyright owners have the right to control how/whether their works are:

- Copied
- Modified
- Distributed
- Publicly Displayed
- Publicly Rendered or Performed

# Copyright: Key Points

To reuse copyrighted works, your choices are to:


- Limit to works for which you own the copyright
- Get permission (with or without payment)
- Use if it qualifies as Fair Use
- Limit to those already licensed for your use

OR

Limit to works in the public domain (not copyrighted)

# Reusing copyrighted works: permission or fair use?

gettyimages Creative Editorial Video Music



**Buckminsterfullerene**

Credit: [Evan Oto](#)  
Creative #: 543368577

A molecular model of buckminsterfullerene, a fullerene molecule with 60 carbon atoms creating a stable spherical shape with 20 hexagon faces and 12 pentagon faces.

**Details**

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**Keywords**

Model - Object Molecular Structure Respect  
Carbon Atom Chemistry Color Image Fullerene  
Horizontal Illustration No People Science Shape  
Sphere White Background

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Source: Getty Images, Buckminsterfullerene

Credit: Evan Oto, Creative #:543368577

<http://www.gettyimages.com/detail/illustration/buckminsterfullerene-stock-graphic/543368577>

# Fair Use (USC Title 17, Section 107)

- Generally applies when the use has societal benefit that outweighs economic loss to the owner
- Law requires a Four Factors analysis
- Clearly covers distributing multiple copies for in-class use
- May cover other teaching activities, but not always:
  - Must perform a four factors analysis for each case !

# Fair Use - Four Facts Analysis

1. Purpose of the use
2. Nature of work being used
3. Amount of work being used
4. Effect of use on market/economic interest of owner

**Fair Use Checklist**  
Copyright Advisory Office  
Columbia University Libraries  
Kenneth D. Crews, Director  
<http://copyright.columbia.edu>

Name: \_\_\_\_\_  
Institution: \_\_\_\_\_  
Project: \_\_\_\_\_  
Date: \_\_\_\_\_  
Prepared by: \_\_\_\_\_

## Purpose

### Favoring Fair Use

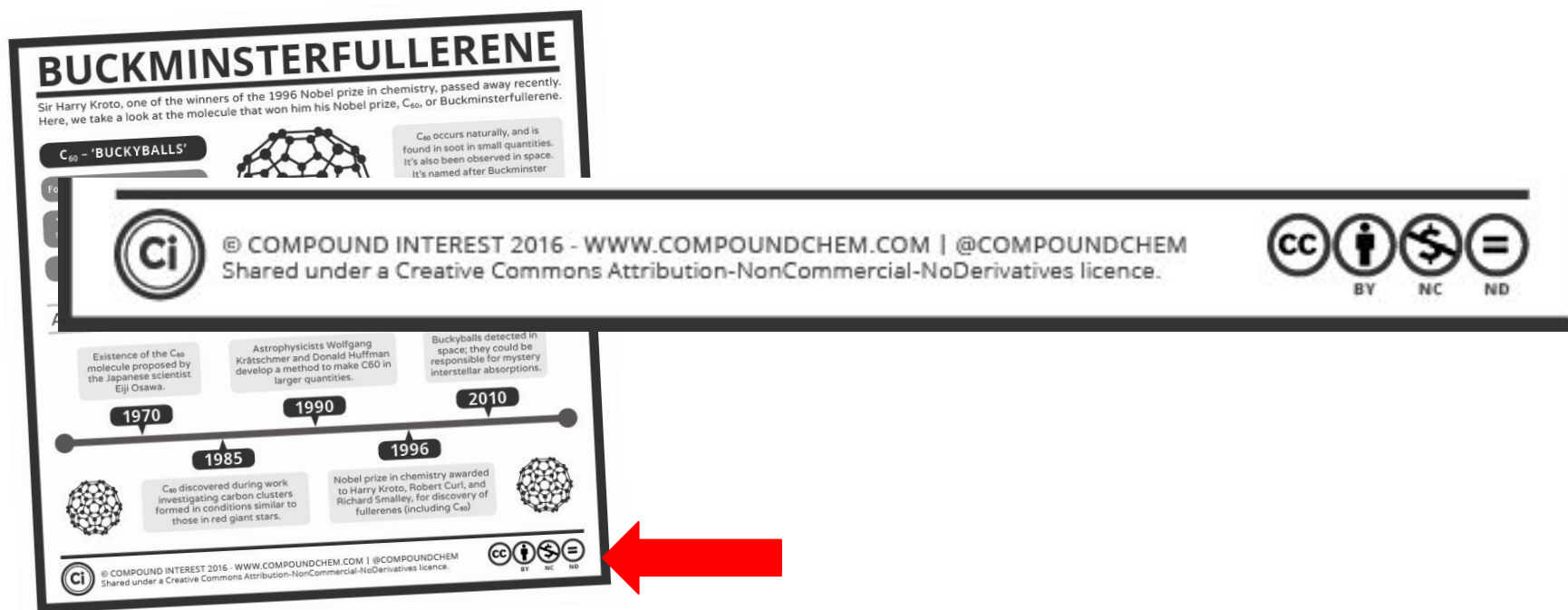
- ☐ Teaching (including multiple copies for classroom use)
- ☐ Research
- ☐ Scholarship
- ☐ Nonprofit educational institution
- ☐ Criticism
- ☐ Comment
- ☐ News reporting
- ☐ Transformative or productive use (changes the work for new utility)
- ☐ Restricted access (to students or other appropriate group)
- ☐ Parody

### Opposing Fair Use

- ☐ Commercial activity
- ☐ Profiting from the use
- ☐ Entertainment
- ☐ Bad-faith behavior
- ☐ Denying credit to original author

*Fair Use Checklist*, Copyright Advisory Office  
Columbia University Libraries,  
<https://copyright.columbia.edu/basics/fair-use/fair-use-checklist.html#Fair%20Use%20Checklist>

# Case Study: Images



Source: Compound Interest - Sir Harry Kroto & Buckminsterfullerene, <http://www.compoundchem.com/2016/05/02/buckyballs/>  
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# Rights Spectrum



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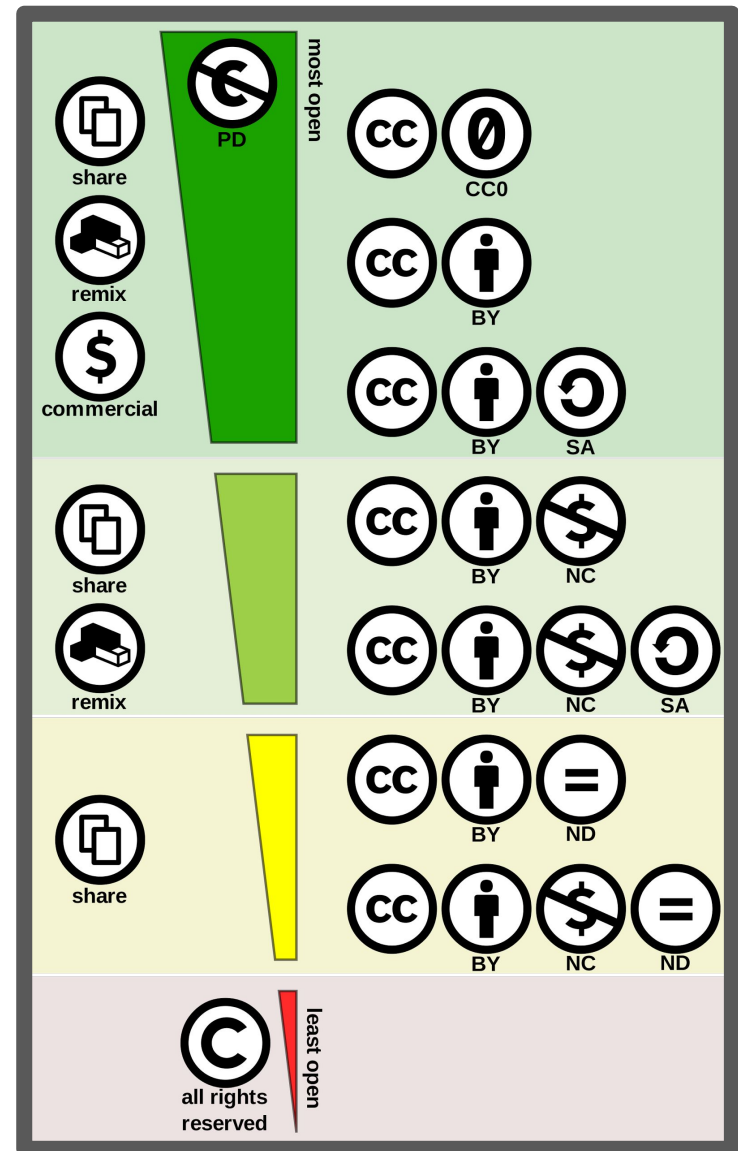


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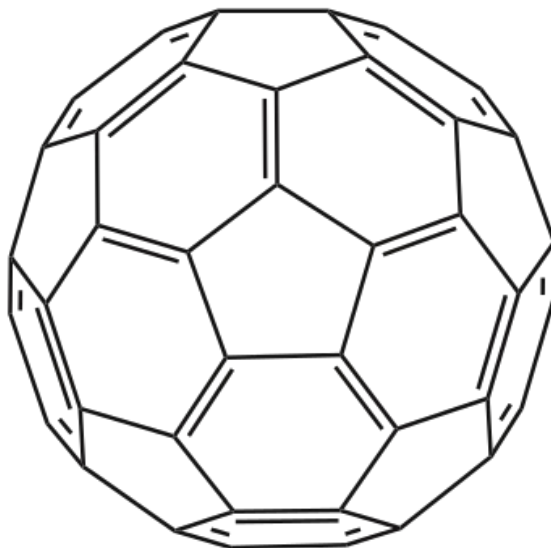
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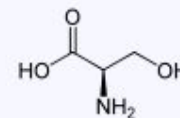


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Source: Wikimedia Commons, File:Buckminsterfullerene.svg, <https://commons.wikimedia.org/wiki/File:Buckminsterfullerene.svg>

# Questions?

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